UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/589,903	08/17/2006	Yuka Fujita	1163-0578PUS1	2326

2292 7590 03/31/2009
BIRCH STEWART KOLASCH & BIRCH
PO BOX 747
FALLS CHURCH, VA 22040-0747

EXAMINER	
LAY, MICHELLE K	

ART UNIT	PAPER NUMBER
2628	

NOTIFICATION DATE	DELIVERY MODE
03/31/2009	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

mailroom@bskb.com

Office Action Summary	Application No.	Applicant(s)	
	10/589,903	FUJITA ET AL.	
	Examiner	Art Unit	
	MICHELLE K. LAY	2628	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *17 August 2006*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-5* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-5* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *17 August 2006* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Specification

The abstract of the disclosure is objected to because of the reference characters used. Correction is required. See MPEP § 608.01(b).

Information Disclosure Statement

The information disclosure statement(s) (IDS) submitted on 08/17/2006, 01/31/2008 and 11/05/2008 is being considered by the examiner.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim **5** is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 5 recites the limitation "substantially changed" in line 2, however the use of the term "substantially" fails to give a definite value for how much the presentation style of the frame needs to have changed in order for the image enhancing means to not carry out the image enhancing processing. Additionally, Applicant's disclosure fails to provide further definition. In regards to paragraph [0050] of the publication (2007/0171235), the disclosure recites a "large extent of change occurs", but as with the rational above, a "large extent" fails to provide a definite value for how much change is required.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims **1-4** are rejected under 35 U.S.C. 103(a) as being unpatentable over Kondo et al. (2003/0030749 A1).

In regards to claim **1**, Kondo teaches a system for converting a video signal from SD to HD. Fig. 1 shows the structure of a TV receiver (100) (said ***receiving means; image presentation means***) that converts a 525i signal as an SD signal obtained from broadcast signals, converts the 525i signal into a 1050i signal as an HD signal, and displays pictures based on the 1050i signal [0040]. Receiver (100) comprises a on-screen display (OSD) circuit (112) for generating a display signal SCH for displaying characters, figures, etc., on the screen of the OSD unit (112), and a combining unit (113) (said ***combining unit***) that supplies the display unit (111) (said ***image display means***) with a composite signal obtained by coming the display signal SCH with the HD signal output from the picture signal processor (110) [0043]. Furthermore, Kondo teaches a motion call detecting circuit (125) that calculates ***interframe differences*** [0056]. This is further used within the coefficient data to convert the SD signal into the HD signal (said ***correction target region; image enhancing means***) [0062]. Although Kondo fails to explicitly teach 'monomedia', Kondo does teach a received broadcast

signal received by receiver (100), and further teaches OSD data. It would have been obvious to one of ordinary skill in the art that the received broadcast signal comprises video and text (such as closed captioning), and therefore, teaches ***monomedia data***.

In regards to claim **2**, Kondo teaches a motion call detecting circuit (125) that calculates ***interframe differences*** [0056]. This is further used within the coefficient data to convert the SD signal into the HD signal [0062]. Thus the system of Kondo ***corrects*** the SD signal (said ***display attribute data***) to be displayed as a HD signal (said ***correct target region***).

In regards to claim **3**, Kondo teaches an adaptive dynamic range coding to perform data compression (said ***correction region managing means***) [0052]. The picture signal processor (110) includes a motion class detecting circuit (125) that, based on the data of the motion class tap, selectively extracted by the third tap-'electing circuit (123) [0055]. The motion class detecting circuit (125) calculates interframe differences of the motion class taps (said ***correction data generating means***) [0056]. The SD signal is stored in the buffer memory (109) (said ***buffer***) and is extracted by the second and third tap-selecting circuit (122) to create the HD signal, pixel by pixel [0102]. The interframe difference is further used within the coefficient data to convert the SD signal into the HD signal (said ***image correction means***) [0062].

In regards to claim **4**, Kondo teaches a system for converting a video signal from SD to HD. Fig. 1 shows the structure of a TV receiver (100) (said ***image presentation means***) that converts a 525i signal as an SD signal obtained from broadcast signals, converts the 525i signal into a 1050i signal as an HD signal, and displays pictures based on the 1050i signal [0040]. Kondo teaches a motion call detecting circuit (125) that calculates ***interframe differences*** [0056]. This is further used within the coefficient data to convert the SD signal into the HD signal (said ***correction target region; image enhancing means***) [0062].

Claim Objections

Claim **5** is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims as well as being rewritten to overcome the 112 2nd paragraph rejection above.

Reference(s) Kondo et al. (2003/0030749 A1) and Itoh et al. (6,452,579) are made of record as teaching enhancing an image and video signal based on interframe differences. However, none of the cited prior art teaches or suggests if there is "substantial" interframe difference, no enhancement is made, as claimed, and further in combination with the additional limitations of claim 1 and 4 from which claim 5 depend upon.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michelle K. Lay whose telephone number is (571) 272-7661. The examiner can normally be reached on Monday-Friday 7:30a-5p.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kee M. Tung can be reached on (571) 272-7794. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Michelle K. Lay/
Examiner, Art Unit 2628
23 March 2009